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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PUENTE, EMERSON C

ART UNIT PAPER NUMBER

2113

DATE MAILED: 04/07/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/654,089

Applicant(s)

WATANABE ET AL.

Examiner

Emerson C Puente

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-7 and 10-12 is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/1/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claims 2-7 and 11-18 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application No. 0674262 of Carlson et al. referred hereinafter "Carlson" in further view of US Patent No. 3,632,881 of Graham.

In regards to claim 13, Carlson discloses:

transmitting periodically a signal different from data to said transmission side transfer path. Carlson discloses returning an acknowledgement if signal is received (see column 5 lines 43-44);

monitoring whether or not a signal different from data is received from said reception side transfer path, said signal to be monitored being periodically received from said other inter-network apparatus. Carlson discloses periodic handshaking wherein short signals are sent to the other controller which returns an acknowledgement (see column 5 lines 40-45);

judging that a failure occurs in said other inter-network apparatus or on said reception side transfer path, when detecting that said signal to be monitored is not received from said reception side transfer path. Carlson discloses the failure of one of the unit controllers to receive an appropriate signal provides an indication that the other unit has suffered a problem (see column 5 lines 44-47).

thereafter stopping transmitting said signal to be transmitted periodically to said transmission side transfer path. Carlson discloses returning an acknowledgement if signal is received, which means the acknowledgement or signal is not sent if the signal is not received,

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thus indicating thereafter stopping transmitting said signal to be transmitted periodically to said transmission side transfer path (see column 5 lines 40-45).

However, Carlson fails to explicitly disclose:

wherein the transmission side transfer path and the reception side transfer path are independent of each other.

Graham discloses communication between devices including a transmission section and a receiver section, indicating wherein the transmission side transfer path and the reception side transfer path are independent of each other

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the transmission side transfer path and the reception side transfer path independent of each other. A person of ordinary skill in the art would have been motivated because Carlson discloses messages between two units being transmitted to each other (see column 5 lines 35-40), indicating bi-directional communication, and having communication between devices including a transmission section and a receiver section, indicating wherein the transmission side transfer path and the reception side transfer path are independent of each other, as per teachings of Graham, is a known means of bi-directional communication (see abstract).

In regards to claim 14, Carlson discloses in said step of transmitting said signal different from data, a control signal is transmitted during a period other than a data communication period. Since the periodic handshaking occurs independent of the data communication, there must be an instance or period wherein a signal is transmitted and there is no data communication. Thus it is inherent a control signal is transmitted during a period other than a data communication period.

In regards to claim 15, Carlson discloses in said step of transmitting said signal different from data, a signal representing that an own inter-network apparatus operates normally is transmitted (see column 5 lines 40-45).

In regards to claim 16, Carlson discloses:

transmitting periodically or continuously a link-up signal to said other inter-network apparatus via said cable. Carlson discloses periodic handshaking wherein short signals are sent to the other controller which returns an acknowledgement (see column 5 lines 40-45);

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confirming periodically whether or not a link-up signal is received from said cable, said link-up signal to be confirmed being periodically received from said other inter-network apparatus. Carlson discloses returning an acknowledgement if signal is received (see column 5 lines 43-44);

judging that a failure occurs in said other inter-network apparatus or on said second transfer path of said cable, when detecting that the link-up signal to be confirmed is not received from said cable. Carlson discloses the failure of one of the unit controllers to receive an appropriate signal provides an indication that the other unit has suffered a problem (see column 5 lines 44-47); and

thereafter stopping transmitting said link-up signal to be transmitted periodically to said other inter-link apparatus, to thereby cause said other inter-link apparatus to detect the occurrence of the failure. Carlson discloses returning an acknowledgement if signal is received, which means the acknowledgement or signal is not sent if the signal is not received, thus indicating thereafter stopping transmitting said signal to be transmitted periodically to said transmission side transfer path (see column 5 lines 40-45).

However, Carlson fails to explicitly disclose:

wherein the transmission side transfer path and the reception side transfer path are independent of each other.

Graham discloses communication between devices including a transmission section and a receiver section, indicating wherein the transmission side transfer path and the reception side transfer path are independent of each other

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the transmission side transfer path and the reception side transfer path independent of each other. A person of ordinary skill in the art would have been motivated because Carlson discloses messages between two units being transmitted to each other (see column 5 lines 35-40), indicating bi-directional communication, and having communication between devices including a transmission section and a receiver section, indicating wherein the transmission side transfer path and the reception side transfer path are independent of each other, as per teachings of Graham, is a known means of bi-directional communication (see abstract).

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In regards to claim 17, Carlson discloses in said step of transmitting said link-up signal, said link-up signal is transmitted during a period other than a data communication period. Since the periodic handshaking occurs independent of the data communication, there must be an instance or period wherein a signal is transmitted and there is no data communication. Thus it is inherent a link-up signal is transmitted during a period other than a data communication period.

In regards to claim 18, Carlson discloses in said step of stopping transmitting said link-up signal, transmission of said link-up and data is stopped (see column 5 lines 40-50).

Allowable Subject Matter

Claims 2-7 and 10-12 are allowable as indicated in the previous office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Emerson Puente, whose telephone number is (703) 305-8012. The examiner can normally be reached on Monday-Friday from 8:00AM- 5:00PM, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Robert Beausoliel*, can be reached on (703) 305-9713 or via e-mail addressed to [*robert.beausoliel@uspto.gov*]. The fax number for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [*emerson.puente@uspto.gov*].

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All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 305-3900.

Emerson Puente
4/4/04


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